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# THE Agricultural Situation

MAY 1952

Volume 36 Number 5

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# *Order Pesticides, Fertilizers Early ... Farmers Urged*

**T**O FACILITATE moving to farms the heavy volume of pesticides and fertilizers needed to support this year's high-level farm output, farmers have been urged to order their supplies well ahead of the time for applying these essential production materials. Where farmers have not already made these purchases, orders should now be placed in most parts of the country.

## Avoid Delivery Bottlenecks

Although the over-all supplies of both pesticides and fertilizers should be adequate enough to forestall any serious shortages during the year, advance ordering is essential if we are to avoid possible bottlenecks which would affect farmers' production plans. A last minute rush for these materials would heavily tax industry's ability to fill orders and the channels of transportation from factory to farm.

It is especially important to get timely shipments of pesticides and fertilizers into the feed grain and cotton-growing areas of the country in view of the defense urgency of meeting production goals for output of feed grains and cotton, Secretary of Agriculture Bran-nan has pointed out.

Farmers' total requirements this year for pesticides, including insecticides, fungicides and herbicides (weed killers), are expected to run about 9 percent higher than in 1950-51, according to a recent Nation-wide survey conducted by the Department of Agriculture. On the whole, supplies should be equal to the demand and prices generally are not greatly different from those of a year ago. Supplies of pesticides containing copper and sulfur, however, may not be sufficient to fill all demands during the year, but alternate materials will be generally available. Supplies of lead arsenate, critically short earlier in the year, are greatly

improved. Farmers should be able to get sufficient quantities of such weed killers as 2,4-D and 2,4,5-T.

A generally strong demand for fertilizers this year puts heavy pressure on the Nation's fertilizer supplies. Fertilizer supplies on the whole are slightly increased although it is expected that less phosphate will be available than last year. With an especially heavy demand anticipated for ammonium nitrate, supplies of such materials as well as phosphates will be somewhat tight. Potash is in fairly good supply.

## The Situation For Farm Production Facilities

The supply of farm workers will be smaller than in '51, and shortages are probable in local areas. In general, however, the labor supply is expected to be adequate for high agricultural production. Farm wage rates will average 5 to 10 percent higher than in '52.

Farm machinery outlook is fairly hopeful, with production running at 80 to 85 percent of estimated farmers' requirements. A better balance is expected in the types of equipment turned out.

Portable irrigation supplies should be more favorable, because of an increased allotment of aluminum during the second quarter.

Pesticides production is expanding. But trouble could come from growers failure to buy in time to insure proper distribution . . . or if insect infestations should prove more serious than anticipated.

Fertilizer supply situation remains about the same as reported earlier in the year . . . slight increase in production from last year, but not quite enough to meet estimated demands. Danger here also that farmers may delay too long in obtaining supplies. In the South, orders through March were running about 20 percent behind a year ago. In the Corn Belt, supplies are moving faster than last year with indications that farmers plan to increase nitrogen applications, and that some farmers who have not used fertilizer before will do so this year.

Containers situation. Metal cans for perishables will be adequate and there will be more cans available for other foodstuffs. General container situation has eased.

India recently cut export duty on burlap in half. This should permit this bagging material to get back to a competitive position here. Supply is abundant.

Binder twine and baler twine supplies appear to be adequate.

Trucks, tires, fuels, and other supplies . . . situation very good.

## Farms and Firms, I

# Recent Climb in Farm Ownership Seen in Historical Perspective

THE STRENGTHENED ownership position of farms (reported in the March 1952 *Agricultural Situation*) becomes quite dramatic both in historical perspective and in relation to the rise in number of commercial and industrial enterprises.

The decline in percentage of farms operated by tenants—from 42 percent in 1930 to 27 percent in 1940, and to something less than that today—actually has wiped out the increase in tenancy that had developed over the preceding five or six decades. The accompanying chart shows this in terms of farms operated by owners.

Had the downward trend continued, we now would have only about 55 per-

### Farms and Firms Series

THIS is the first of three articles by Louis H. Bean, on Farms and Firms. It illustrates the recent rise in farm ownership in the changing balance between agriculture and industry.

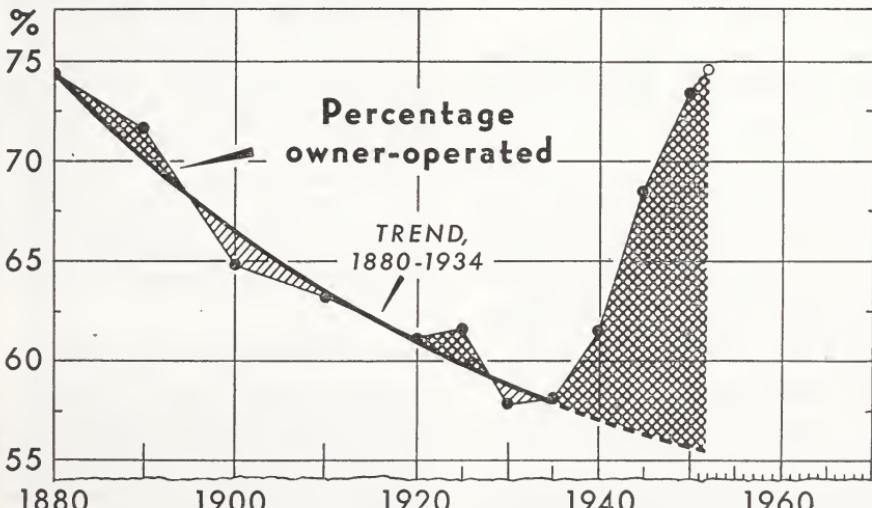
The second will show the rise in commercial and industrial opportunities (business firms in operation) to a new record high, that has helped draw farm people off the land as farms—having become more productive—produce a larger output with fewer operators, and require relatively less labor.

The third will show that we are heading for a balance between agriculture and industry.

Mr. Bean, a former BAE Economist, is economic adviser in the office of the Secretary of Agriculture.

### Percentage of Farms Owner-Operated

## GAIN IN LAST TWO DECADES WIPES OUT 55-YEAR DECLINE



cent of all farms owner-operated instead of nearly 75 percent.

Much of this rise in ownership proportion reflects the decline in tenancy in the South and the Great Plains. It means that the "agricultural ladder" has been at work. Some tenants have become part or full owners. Other tenants have found more attractive commercial and industrial opportunities. In addition, some owners have retired from farming and, to complete the circle, there have been some without farming experience who have gone into farming as tenants. In spite of the absolute decline in the total number of farms, there are about a quarter

of a million more farms operated by owners today than in 1930.

A study of the tenure trend will show a tendency for ownership to decline with industrial depressions and to strengthen with prosperity. The sharp uptrend after 1932 must be associated with the agricultural-industrial recovery programs of the 1930's and with the growth of mechanization and productivity that the improved farm income made possible. The net result is relatively more private ownership, more private enterprise, and less absentee ownership.

Louis H. Bean

*Office of the Secretary, USDA*

## Outlook Highlights

• • • MAY 1952

**I**T NOW appears that farmers' net income in 1952 will be somewhere near the \$14.9 billion realized last year. Gross income is still high but may be leveling off as lower average prices tend to offset the increased output. Production costs, on the other hand, have continued to rise, though at a slower rate than last year. Decline in the *net* from a year ago is not likely to exceed a half billion dollars.

### Domestic Demand Strong, Smaller Trade Abroad for Farm Products

Rising expenditures for defense and a continued high level of business spending for investment indicate record economic activity. Employment, wage rates, and incomes probably will continue to rise gradually and domestic demand for farm products in general will be maintained at a high level.

Exports of farm products, however, will be smaller this year than in '51.

### More Beef Ahead, Less Pork

In the remaining months of 1952 production of beef will exceed a year earlier, lamb and mutton will show a small gain, and pork output is expected to drop below a year earlier. Meat production in total, for the rest of the

year is expected to remain above last year.

### Higher Prices for Milk and Butterfat

Prices received by farmers for milk and butterfat for the rest of 1952 are expected to average higher than a year earlier. Demand for milk and dairy products probably will continue high; supplies, however, though seasonally large, will be smaller than a year earlier for the rest of this year.

### Feed Situation To Continue Tight

Indications point to a continued fairly tight feed supply situation during the coming 1952-53 feeding season. The prospective supply per animal unit is about the same as in 1951-52, but moderately smaller than during the years 1948-50. Feed grain production (based on acreage indicated in March) is estimated to total about 121 million tons, 6 percent more than last year. But an expected smaller carry-over into the 1952-53 season would more than offset the expected increase in production.

### Grain Stocks Down 15 Percent

Stocks of corn, oats, and barley in all positions on April 1 totaled about 55 million tons, 16 percent smaller than on that date last year. Disappearance of corn during January, February, and March was the heaviest in recent years,

*(Continued on page 12)*

# *Our Territorial Lands*

## **Outlying Areas Total One-fifth as Much Land as Continental United States**

**I**N ADDITION to the agricultural land in the 48 States comprising the continental United States, there is the land in the 4 outlying territories and 9 small islands, or groups of islands, forming the remainder of the Nation's land area.

These territories and islands consist of Alaska, Hawaii, Puerto Rico, Panama Canal Zone, Guam, Midway, American Samoa, Wake, and six other smaller inhabited islands. Alaska, Hawaii, and Puerto Rico have territorial governments somewhat similar to States. While there is some variation in the territorial status of the other areas, they are classed as territories for the purpose of this article.

### **Large Portion in Alaska**

The territories contain about one-fifth as much land as continental United States. Some 365 million of the 372 million acres of our territorial land is in Alaska—the largest but least populous of our territories, more than twice as large as Texas.

Hawaii is the second largest of the territories. The six principal islands and a number of smaller islands composing Hawaii embrace about 4,100,000 acres, being slightly less than New Jersey in size. Puerto Rico, the third territory in point of area, contains 2,191,000 acres, about two-thirds the size of Connecticut.

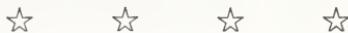
Other smaller areas include the Panama Canal Zone on the Isthmus of Panama; the Virgin Islands, in the Caribbean Sea; and American Samoa, Guam, Midway, Wake, and six other small islands in the Pacific Ocean. All these additional areas combined contain only about 600,000 acres of land, being smaller than Rhode Island in area. Midway Island is usually considered a part of Hawaii. These territories which are a part of the United

States are exclusive of the three groups of islands embraced in the Trust Territory of the Pacific administered as a trustee of the United Nations. These trust territories include the Caroline Islands, the Marshall Islands, and Palau Island, a total land area of about half a million acres. Of the trust territory about 30,000 acres are devoted mainly to cocoanuts (copra) and subsistence crops.

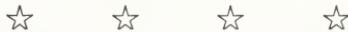
### **Small Acreage For Farming**

About half of the land of Alaska is forest and wild grassland. Much of the remaining half is treeless tundra. North of the rugged coastal ranges, high plateaus and still higher mountains are interspersed with tundra plains and marshy stream valleys.

About one million acres in Alaska are believed suitable for crop production under present economic conditions. Another four million acres might support fair to good summer pastures. Land used for agriculture in Alaska at present is limited largely to small areas around some of the chief towns, such as Fairbanks and Anchorage, and in the Matanuska Valley.



*Another land article by H. H. Wooten appeared in the February issue and dealt solely with continental United States.*



Farm management studies show that a major obstacle for farmers in Alaska is the high cost of land development.<sup>1</sup> Very little financial help can be obtained for clearing land, an operation which costs from \$100 to \$200 per acre before a field can be planted. Land is being cleared, however; over 1,000 acres being cleared per year for the last three years. Crop production in Alaska is largely limited to cool-season species.

<sup>1</sup> Two recent publications on the farm management and marketing aspects may be obtained from the Bureau of Agricultural Economics, U. S. Department of Agriculture: "Some Economic Aspects of Farming in Alaska" and "Markets for the Croplands of Alaska."

Forage crops, hay, oats, potatoes, cabbage, and certain small fruits and vegetables thrive in the short summer season. Dairying to supply whole milk to local towns is becoming a primary agricultural enterprise.

Parts of Hawaii, Puerto Rico, and the Virgin Islands are farmed intensively, and have a great deal of their land in cultivation and pasture.

In Hawaii there are nearly 500,000 acres in cropland. Of this acreage about one-third is cropland harvested annually; one-third is cropland pasture; and one-third is fallow land and land growing crops not harvested or pastured. Sugarcane and pineapples are among the important commercial crops in terms of market value. Sugarcane occupies nearly one-half the cropland. Other chief crops include vegetables, fruits, and feed crops. Livestock is found in certain areas naturally adapted to grass and other forage. There are 5,748 farms in Hawaii. Farms average about 423 acres in size. The range in acreage, however, is quite large—from small part-time farms to large sugar plantations.

Puerto Rico, with over 1 million acres of cropland, like Hawaii, reaps a considerable part of its cash farm income from sugarcane. About one-third of

the cropland is in sugarcane. Many other crops are produced. Vegetables and fruits are important for home use. Farms on the whole average only about 35 acres in size, although some of the sugar plantations are quite large. There are 55,519 farms in Puerto Rico, more than in any other territory. In addition to farms there are 51,157 small agricultural parcels that produced some agricultural products in 1949. Largely because of the small acreage per farm the number of livestock is low per farm.

The agriculture of the Pacific Islands, American Samoa, Guam, and others consists largely of tropical fruits, vegetables, and other subsistence products. Copra is an important product produced for outside markets.

In all, available estimates indicate that the territories have over 1.5 million acres of cropland, 1.4 million acres of farm pasture, and 2 million acres of woodland and other land in farms, or a total of about 5 million acres of land in farms. About three-fourths of the land used for agriculture is in Hawaii and Puerto Rico. The territories have over 66,000 farms, a number comparable roughly to one of our States, such as Florida or South Dakota.

H. H. Wooten  
Bureau of Agricultural Economics

### Use of Land in Farms U. S. Territories, 1950<sup>1</sup>

Territories	Farms	Total crop-land <sup>2</sup>	Pasture not crop-land and not wood-land	Total woodland	Other land in farms	Land in farms	Land not in farms	Total land area
	<i>Number</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>
Alaska-----	525	15	354	43	10	422	365, 060	365, 482
American Samoa-----	1, 490	3	-----	-----	11	14	34	48
Guam-----	2, 262	2	-----	-----	23	25	105	130
Hawaii-----	5, 748	465	796	703	468	2, 432	1, 668	4, 100
Panama Canal Zone <sup>3</sup> -----	150	2	27	16	1	46	307	353
Puerto Rico <sup>4</sup> -----	55, 519	1, 023	161	277	371	1, 832	359	2, 191
Virgin Islands-----	755	12	26	23	3	64	21	85
Wake and other Island <sup>5</sup> -----	-----	-----	-----	-----	-----	-----	-----	100
Total territories	66, 449	1, 522	1, 364	1, 062	887	4, 835	367, 554	372, 489

<sup>1</sup> Based on the U. S. Census of Agriculture 1950, except where otherwise noted. <sup>2</sup> Cropland harvested, crop failure, summer fallow and other cropland. <sup>3</sup> Data from FAO Yearbook of Food and Agricultural Statistics, 1950.

<sup>4</sup> U. S. Census of Agriculture, 1940. <sup>5</sup> Based on estimates from various sources.

# Hail Insurance On Growing Crops

PRELIMINARY reports for 1951 show a continued increase in the volume of crop-hail insurance carried by farmers. As crop values increase, and with high living and operating costs, it is only natural that more use is made of this method of protecting prospective income.

Last year farmers paid more than \$50 million in premiums for \$1.3 billion insurance against hail damage to their crops—more than in any previous year. They received about \$35 million in payment for losses, also a record high. The largest increases in the amount of insurance were on tobacco, especially in North Carolina and Georgia, and on cotton, in Arizona. Farmers in Illinois alone carried about \$307 million insurance in 1951, mostly on corn, soybeans, and oats.

Less hail insurance is used when crop prospects are below average. There is less value to protect and it is harder to pay the premiums if hail does not strike. The poor prospect for winter wheat in parts of the Great Plains in 1950 and 1951 reduced the volume of hail insurance in those areas.

The amount of insurance can be increased later in the season if crop prospects warrant, but no reduction in premium cost is allowed. This is because the risk of hail loss increases as the crop matures. If the crop deteriorates or is lost through other causes, the hail insurance may be cancelled, usually with some refund of premium.

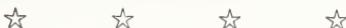
## Premiums and Dividends

The premium rate charged by most companies is based on the loss experience in the area. It is usually higher on the crops most easily damaged by hail, such as tobacco, fruits, and vegetables than on small grains. Except

for a few areas the premium rates for 1952 are the same as in 1950, shown in the map on page 8. The changes since 1950 are mostly reductions in the lower rates, where losses have been lower in proportion to premiums than in other areas.

Hail insurance is sold in every State by stock companies, in about half of the States by mutual companies, and in Colorado, Montana, and North Dakota by State Hail Departments. The stock companies and most of the mutuals charge a fixed premium rate. The remaining mutuals and the North Dakota Hail Department levy an assessment after the losses for the year are known. Some mutuals pay dividends in years when losses are low, thereby reducing the net cost of the insurance.

In some States the premium must be paid in cash, in others a note may be taken (without interest) that comes due after the insured crop is harvested. Some companies will take a note, but also offer discounts for cash payments.



Another article on insurance for farmers will appear in an early issue. It will deal with the *all-risk crop insurance program* authorized by Congress and developed by the U. S. Department of Agriculture.



The risk of loss by hail is more like that from windstorm than from fire. Widely separated farm buildings usually burn only one at a time. For this reason neighbors can share the fire risk with each other in a local mutual company. But in the case of hail or wind, all are subject to the same storm. For this reason the companies that sell hail insurance over a wide area are in a better position to pay all losses in full than the small companies patterned after the township or county assessment fire mutuals.

The smaller companies, however, can protect their financial condition by building up their reserves in years of low losses, reinsuring against exceptionally heavy losses, or spreading their overhead expenses and risk on other lines of insurance. Most of the mutuals have followed two or three of the above-mentioned practices and have paid all of their crop-hail losses in full.

Hail insurance is bought by owners, tenants, or landlords who have an interest in the crop. In case of loss from hail, the appraised percent of damage is multiplied by the amount of insurance per acre in order to calculate the loss payment. The damage may not be the same on all parts of the field or on all of the insured crops. In this case, calculations are made for the different parts of the field or crops to arrive at the total loss payment.

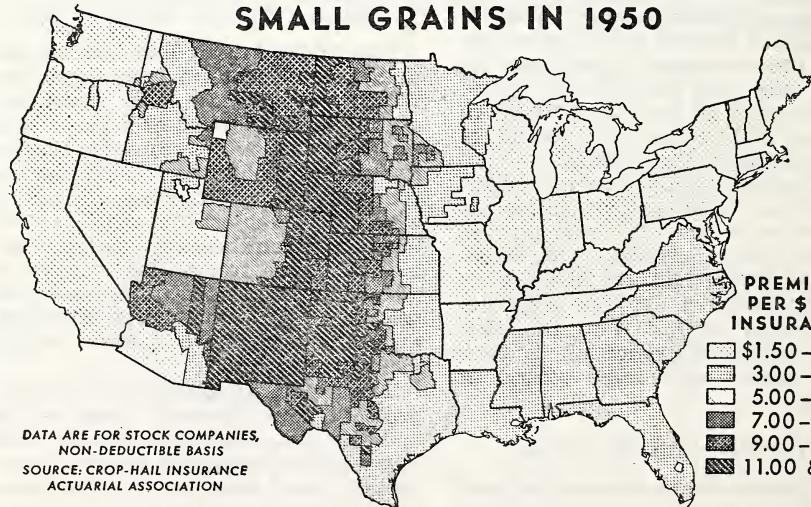
Farmers should give more consideration to deductible policies when their premium rates are relatively high, say \$5 or more per \$100 insurance. This type of protection is similar to that given by the \$50 deductible automobile collision policy. With the deductible policy the farmer protects himself against the heavy losses but carries the burden of minor losses himself. All of the stock companies and a few of the mutuals offer 10 or 25 percent deductible crop-hail policies at substantially reduced premium rates.

Under such a policy the percentage damage from hail is calculated in the usual manner, and then 10 or 25 percent (depending on the policy selected) is deducted from the estimated percentage damage before the loss payment is calculated. If, for example, 40 percent damage occurs from hail, the payment under a 25 percent deductible policy would equal 15 percent of the face amount of the policy. In other words, the farmer carries the risk of small losses but is protected against the more serious ones.

The deductible hail policy is especially useful in counties where all-risk crop insurance has been made available by the Federal Government. All risk insurance is designed to protect only the investment in a crop. On the other hand, crop-hail insurance covers not only the cost but also the potential net income needed for living expenses.

John C. Ellickson  
*Bureau of Agricultural Economics*

## HAIL INSURANCE RATES FOR SMALL GRAINS IN 1950



U. S. DEPARTMENT OF AGRICULTURE

NEG. 47854-HX BUREAU OF AGRICULTURAL ECONOMICS

# Sugar Beet Mechanization

## Progress Made in Harvesting

UNTIL JUST a few years ago, production of sugar beets required about 60 man-hours of labor per acre. The beets were thinned by hand, hoed by hand, and, at harvest, were topped and loaded by hand. Even the substitution of tractor power for animal power had resulted in a saving of only 9 man-hours of labor per acre. Mechanical harvesters were experimented with briefly during World War I; but not until the 1930's was a great deal of research and experimentation done on the problems of mechanizing the production of beets.

Some growers had tried to use mechanical thinners, blockers, and weeders but the new machines did not prove satisfactory for general use. Under authority of the Research and Marketing Act of 1946, Warren R. Bailey of the Bureau of Agricultural Economics has completed a study of mechanical harvesting of sugar beets in California. This article presents some of the findings.

### Machines Gather Bulk of Crops

During World War II, mechanical harvesters were successfully developed. The shortage of labor that plagued the industry during the war hastened development of the harvesters, one of which—a one-row model—was first used commercially in 1943. In 1944, a two-row model was introduced and in 1945, 155 machines were in use in California with 28 percent of the beets harvested mechanically. Since 1948, almost three-fourths of the acreage of beets in California have been harvested by machines. In 1951, of a total harvested acreage of 140,000 acres, 105,000, or 75 percent, were machine harvested.

Two types of harvesters were in common use in California in 1948.

The Two-Row-Spike-Wheel Harvester has, as an unusual feature, a pair of wheels 6 feet in diameter, with closely

spaced spikes on the rim. As the harvester moves along the row, plowlike tools loosen the beets and the spikes lift them from the ground. The beets are wedged off the spikes by topping chisels or disks. They next drop on cleaning rollers, then go to a conveyor belt which elevates them into a truck that moves beside the harvester.

Needed for this harvester are a powerful track-laying tractor and a minimum crew, consisting of the operator of the harvester and the tractor driver. Some growers use one or two hand gleaners to pick up stray beets. In a 9-hour day, a machine of this kind can harvest 6 acres and, with 17 tons to the acre, 102 tons of beets.

Indications are that sugar recovery is about equal with mechanical harvesting and with hand harvesting.

Special windrowing attachments have reduced destruction of tops, a problem when harvesters first came into use.

Costs of mechanical harvesting include direct operating costs such as wages, fuel, oil, and repairs, and overhead costs such as depreciation, interest on investment, personal property taxes, insurance, and shelter. Maintenance and repair and depreciation are the two biggest items. Taking all of these costs into account, 50 acres was about the minimum for which it paid a grower to own a two-row harvester. On smaller acreages, either custom harvesting or a smaller machine was more advantageous.

The One-Row Hand-Sorting Harvester is mounted on a standard general-purpose tractor and trails a loader-bin cart. The unit can be dismounted and the tractor used for other work between seasons. The harvester tops the beets by a rotating helical-cut disk before lifting them. Rotating steel fingers pick the tops off the disk and throw them to one side against a canvas curtain from which they drop to the ground in a windrow. Plowlike tools then lift and guide the topped beets to cleaning rollers. From there they go to a sorting belt above the bin cart.

The beets are sorted by hand into the bin. Usually they are loaded directly into a truck that moves beside

## Sugar Beets Machine-Harvested

Percent of Acreage, California, 1945-51

Year	Number of mechanical harvesters	Acreage machine-harvested
	Number	Percent
1945-----	155	28.4
1946-----	340	51.6
1947-----	500	59.9
1948-----	570	71.0
1949-----	900	78.4
1950-----	1,240	75.1
1951-----	1,300	75.0

the harvester. Clods and trash fall from the sorting belt to the ground.

The crew is made up of a driver-operator and, when clods or trash are prevalent, one or two sorters. In a 9-hour day, this machine can harvest 252 acres, or, in 17-ton beets, 42.9 tons.

If the harvester is properly adjusted, if the driver keeps on the row, and if the sorters are careful, recovery of salable beets compares favorably with recovery by hand harvesting. Nor are the beet tops damaged to any great extent.

Items of cost for this harvester are similar to those for the two-row machine. When the harvested acreage falls below 125 acres, harvesting costs per acre with the one-row machine rise substantially. The minimum acreage for which it would pay a grower to buy one of these machines is about 25 acres. In 1948 for smaller acreages custom harvesting was more economical.

### Custom Harvesting Increasing

While mechanization of sugar beet production was developing in Cali-

(Continued on page 16)

## Mechanized Versus Hand Methods in Harvesting Sugar Beets<sup>1</sup>

### Investment in Equipment, Labor Required, and Cost of Harvesting With 2-row mechanical harvester

ITEM	UNIT	TOTAL	AVERAGE PER ACRE
Acres harvested annually-----	Acres-----	250	
Investment in equipment-----	Dollars-----	9,000	36.00
Labor requirements-----	Man-hours-----	1,350	5.4
Cost-----	Dollars-----	3,430	13.73

### With 1-row mechanical harvester

Acres harvested annually-----	Acres-----	125	
Investment in equipment-----	Dollars-----	3,600	28.80
Labor requirements-----	Man-hours-----	1,225	9.8
Cost-----	Dollars-----	2,262	18.19

### Hand harvesting

Acres harvested annually-----	Acres-----	125	
Investment in equipment-----	Dollars-----	1,400	12.80
Labor requirements-----	Man-hours-----	3,687	29.5
Cost-----	Dollars-----	4,957	39.67

<sup>1</sup> In California, 1948-49, estimated. The cost of harvesting does not take into account the lower value of beet tops that results from machine harvesting. Excludes cost of hauling beets to factory or dump.

# Farm Safety in 1952

IN COOPERATION with the National Safety Council and the National Fire Protection Association, the Department of Agriculture will participate in three safety events in 1952: Spring Clean-Up Week—with the dates left open to fit in with local conditions; Farm Safety Week, July 20-26; and Fire Prevention Week, October 5-11.

## Death, Disability Toll Staggering

Best available estimates indicate that about 15,500 farm people are killed each year in accidents and that about 1,300,000 are injured. It is estimated that farm-work accidents alone kill about 4,000 farm workers annually. About 250 are disabled permanently; about 11,400 sustain major permanent disabilities, such as the loss of an arm or leg; about 30,900 incur minor permanent disabilities, such as the loss of a finger; and about 378,000 are temporarily injured—as by a broken arm or leg—and fully recover. This is a terrible toll in human life, disability and suffering, and an obstacle in attaining our farm production goals.

These 424,550 farm-work accidents cost about \$177 million, an enormous charge against the food and fiber that is produced. But, of course, the cash costs of death, of disability, part-payment for lost time and medical and hospital charges, as here measured by expanded workmen's compensation insurance experience with some farmers, do not accurately account for the total costs. Disabled workers have to be cared for by others in the family, resulting in a two-way loss in volume of farm production.

## What To Do About It?

The problem of preventing and reducing the number of accidents must be squarely faced. What are we going to do about it?

• For one thing, farmers could inspect the premises to locate and remove

### Think Safety!

### Act Safely!

THIS year's slogan in farm safety will be: "Adopt Right Attitudes Toward Farm Safety—Think Safety, Act Safely." Our attitudes regarding safety are of great importance. This is true for all age groups. The young have quick reflexes but sometimes they may be inclined to take chances. Some older folks, however, are also prone to take chances, even though their experience should dictate otherwise.

any hazards that might set up an accident or cause fire.

• They could see that guards are kept on revolving machinery parts. And they could do a better job of housekeeping by keeping sharp tools in their places . . . where they would not cause accidents in movements of haste and forgetfulness.

• Then, too, a first aid kit in the home is a necessity when an accident strikes in spite of advance precaution.

Farmers must recognize that, aside from preventing suffering and medical expense, the prevention of accidents is just plain good business. Within recent years liability statutes have been enacted in most States to provide direct and immediate compensation for those negligently injured, and in one way or another they affect farmers. The better financial position of farmers has made them more subject to suit if their negligence has caused harm to others. This has brought an increased use of liability insurance, especially under the various State motor vehicle safety and financial responsibility laws. Of course the cost of premium payments for this insurance is directly related to the accident experience of those who are insured. Such insurance is so widely used now by farmers that they have a stake in lowering the costs of their insurance. In helping to obtain that reduction, they must drive safely.

John D. Rush  
Bureau of Agricultural Economics

# Outlook Highlights

(Continued from page 4)

reflecting heavy feeding of high moisture corn . . . stocks of corn in all positions April 1 were 17 percent smaller than a year earlier and the smallest since 1948. April 1 stocks of oats and barley also were smaller than a year earlier.

## Big Wheat Crop in Prospect

The third largest wheat crop in United States history is in prospect this year if growing conditions until harvest are about average. Winter wheat estimate in April was 947 million bushels. First estimate of spring wheat production will not be made until June 10, but if farmers plant the acreage indicated by their March intentions and yields by States are average, the spring crop would be about 307 million bushels and bring the total wheat crop to about 1,254 million bushels. With the carry-over on July 1, 1952, expected to total about 270 million bushels, and imports of feeding quality wheat from Canada possibly 40 million bushels, the total supply for 1952-53 would be about 1,564 million bushels. This would be the largest supply in our history except for the 1,600 million bushels in 1942 and 1943.

## Potatoes and Sweetpotatoes

No great change in per capita consumption of potatoes is expected in 1952 compared with 1951, barring a crop failure. Only a slight increase in supplies in 1952 now seems probable on the basis of farmers' planting intentions in March and assuming average yields. If this prospect materializes, not much decline in prices can be expected in the 1952 crop season. However, relatively high prices and the small acreage indicated may encourage farmers to plant a larger acreage.

Little improvement in the abnormally short supplies situation for sweetpotatoes is expected in the 1952 crop season, on the basis of the March intentions to plant. Farmers apparently plan to increase acreage only about 5 percent over last year.

## Cotton Supplies

Mill consumption of cotton is currently running at the annual rate of about 9.5 million bales for the season, but actual consumption may be as much as 300 thousand bales below this figure. Exports are expected to approach 6 million bales and from August 1, 1951, through February 1952, 4,137,000 bales had been exported. The supply of cotton for this season is estimated at about 17.4 million bales, including ginnings of 15 million bales, a beginning carry-over of about 2,300,000, and imports of about 100,000. These figures indicate that the carry-over on August 1, 1952, will probably be smaller than the carry-over at the start of the season which was the smallest since August 1, 1925.

## Peaches and Strawberries

The 1952 peach crop in the 10 Southern States will be somewhat larger than the average-sized 1951 crop if the new crop turns out as large as seemed likely on April 1. The midspring crop of strawberries, most of which will be harvested in May, is expected to be slightly larger than the big 1951 crop. Acreage of the *late spring* crop is slightly larger than the 1951 acreage.

## More Oranges to Processors

Movement of Florida oranges to processors, especially makers of frozen orange concentrate, was much heavier during March and April than comparable movement in 1951. As a result output of frozen orange concentrate by mid-April was more than twice that of comparable output in 1950-51. Output of *canned* orange juice on the other hand was running about 13 percent smaller, and that of canned grapefruit juice 34 percent smaller than in the same part of the 1950-51 season.

## Fats and Oils

Prices of most fats and oils continued to decline in April. In that month, they averaged about 50 percent of the 1947-49 level. Large supplies are expected in 1952-53. Stocks of edible fats and oils on October 1, 1952, may be 50 percent above a year earlier and may exceed the 1937-41 average of 861 million pounds.

# Our Spice Supplies

TODAY, as in centuries past, spices play an important role in food preparation, whether at home or in commercial food processing establishments. Spices add zest and flavor to foods and stimulate the digestive juices, thereby contributing much to the pleasure of eating. They are used whole or ground, or in the form of essential oils. Some spices are used in the manufacture of medicines, and to add fragrance to perfumes and soaps.

The United States purchases and consumes large quantities of spices each year.<sup>1</sup> Prior to 1941 spice consumption ranged from seven-tenths of a pound to 1.2 pounds per capita per year. The 1935-39 annual average was 1 pound per capita. In 1941, 1.6 pounds per person disappeared into domestic channels. This was the highest on record to that date. Undoubtedly some of it was not used that year but was stockpiled.

## Supplies Limited During the War

During World War II, when imports of many spices virtually ceased, supplies were limited. Domestic distribution was controlled under Government regulation and apparent civilian consumption dropped to a low of four-tenths of a pound per person. As spices became more abundant after 1945, consumption gradually increased and in 1950 reached the rate of nine-tenths of a pound per person. However, it is believed that considerable quantities of spices were again going into stocks.

The most popular spices—pepper, cinnamon, cloves, pimento (allspice), vanilla, nutmegs, and mace—are products of slow-growing tropical plants

not adapted to commercial culture in this country and their harvesting requires much hand labor. Condiment plants such as mustard, cayenne and paprika peppers, and sage are grown to some extent each year in the United States. However, data on domestic production are available only for mustard. Domestic output of mustard varies greatly from year to year. The crop of 4.3 million pounds in 1937 was the lowest since 1929. The peak production of 72.5 million pounds was reached in 1941. With the exception of the war years, large quantities of mustard seeds were also imported each year.

Most spices used in the United States are imported. Prior to World War II the United States received most of its spices from Indonesia (formerly the Netherlands Indies), India, China, the Malay Peninsula, the Netherlands, and British West Indies. Poland, Spain, and some of the islands off Africa also were important suppliers. Net imports (imports for consumption minus exports, as reported by the Department of Commerce) of spices and related products into the United States in 1935-39 averaged 122.2 million pounds annually. In 1941, when world spice supplies were relatively large, prices were generally low; but the war situation was growing in seriousness and net imports that year reached the all-time record of 151.4 million pounds.

The war started, of course, in late '41. In the early years of the war, because of enemy occupation of important spice producing areas abroad and of limited ocean shipping space for nonwar material, imports of some spices almost ceased, and total net imports dropped sharply. In 1943 we imported only 28.3 million pounds. After the war net imports began to increase, and in 1950 totaled 122.1 million pounds, virtually the same as the 1935-39 annual average.

## Pepper Lags

Although the over-all spice supply situation in the United States has improved considerably since 1945, the picture for the individual spices has varied. Imports of pepper, by far the most popular spice used in this coun-

<sup>1</sup> Figures for years 1918-50, on both imports and consumption of spices will be found in a recent BAE report.

try, have not yet reached their pre-war rates. In 1950, imports of black pepper for consumption totaled 32.4 million pounds, 80 percent of it being supplied by India. However, this represents only 65 percent of the prewar (1935-39) annual average import of 50.1 million pounds, most of which then came from Indonesia. During the war India became our chief source of pepper, and its production has been increasing since that time. It is doubtful, though, that India will be able to fill the gap left by Indonesia's failure to regain her prewar importance as a source of supply for the United States.

### Substitutes More Plentiful

Tumeric and capsicum have been imported over the past several years

in quantities well in excess of the pre-war rates. These spices are used as substitutes for the higher priced and relatively scarce black and white pepper. Most of the tumeric comes from India. Mexico supplied more than half of the capsicum imported in 1950.

Net imports of cassia in 1949 and 1950 were substantially above the pre-war level and close to the 1946 record of 14.9 million pounds. However, imports of this spice which comes chiefly from Indonesia, China, Hong Kong and French Indochina fluctuated greatly during the past 10 years. In 1941 net imports totaled 13.3 million pounds, the highest on record to that date. During the war years that followed receipts from abroad virtually ceased,

(Continued on page 16)

## Prices of Farm Products

[Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and State]

Commodity	5-year average		April 15, 1951	Mar. 15, 1952	April 15, 1952	Effective parity price Apr. 15, 1952 <sup>2</sup>
	Base period price <sup>1</sup>	January 1935- December 1939				
<b>Basic commodities:</b>						
Cotton (pound)-cents	\$ 12.4	10.34	42.53	36.72	37.30	34.35
Wheat (bushel)-dollars	\$ 884	.837	2.14	2.20	2.18	2.45
Rice (cwt.)-do-	1.95	1.65	5.72	5.21	5.35	5.64
Corn (bushel)-do-	\$ 642	.691	1.62	1.65	1.68	1.78
Peanuts (pound)-cents	\$ 4.8	3.55	10.8	\$ 10.4	10.3	13.3
<b>Designated nonbasic commodities:</b>						
Potatoes (bushel)-dollars	\$ 1.12	.717	1.12	2.16	2.31	\$ 1.73
Butterfat in cream (pound)-cents	26.7	29.1	68.0	77.8	73.6	77.2
Milk, wholesale (100 lb.) <sup>3</sup> -dollars	1.68	1.81	4.37	4.89	74.66	4.86
Wool (pound)-cents	\$ 20.9	23.8	109.0	53.0	49.9	60.4
<b>Other nonbasic commodities:</b>						
Barley (bushel)-dollars	\$ 619	.533	1.30	1.36	1.31	\$ 1.45
Cottonseed (ton)-do-	26.40	27.52	\$ 103.00	61.50	\$ 60.80	76.30
Flaxseed (bushel)-do-	1.65	1.69	4.37	3.88	3.64	4.77
Oats (bushel)-do-	\$ 399	.340	.907	.891	.871	\$ 944
Rye (bushel)-do-	.587	.554	1.61	1.70	1.65	1.70
Sorghum, grain (100 lb.)-do-	\$ 1.21	1.17	2.14	2.52	2.56	\$ 2.85
Soybeans (bushel)-do-	1.00	.954	3.12	2.76	2.72	2.89
Sweetpotatoes (bushel)-do-	.902	.807	2.03	3.83	4.16	2.61
Beef cattle (100 lb.)-do-	7.36	6.56	\$ 30.30	27.60	27.80	21.30
Chickens (pound)-cents	10.7	14.9	29.3	25.0	24.4	30.9
Eggs (dozen)-do-	\$ 21.5	21.7	43.2	33.9	35.2	\$ 50.7
Hogs (100 lb.)-dollars	7.49	8.38	20.60	16.70	16.40	21.60
Lambs (100 lb.)-do-	8.09	7.79	34.30	25.60	26.40	23.40
Veal calves (100 lb.)-do-	\$ 8.21	7.80	33.90	31.40	31.10	23.70
Oranges, on tree (box)-do-	\$ 2.29	1.11	1.77	1.12	.92	\$ 3.54
Apples (bushel)-do-	.991	.90	1.85	2.45	2.57	2.86
Hay, baled (ton)-do-	\$ 11.87	11.20	23.10	25.10	24.80	\$ 28.00

<sup>1</sup> Adjusted base period prices 1910-14, based on 120-month average January 1942-December 1951 unless otherwise noted.

<sup>2</sup> Parity prices are computed under the provisions of title III, subtitle A, section 301 (a) of the Agricultural Adjustment Act of 1938 as amended by the Agricultural Acts of 1948 and 1949.

<sup>3</sup> 60-month average, August 1909-July 1914.

<sup>4</sup> 10-season average 1919-28.

<sup>5</sup> Transitional parity, 85 percent of parity price computed under formula in use prior to Jan. 1, 1950.

<sup>6</sup> Prices received by farmers are estimates for the month.

<sup>7</sup> Preliminary. <sup>8</sup> Relatively insignificant quantities sold for crushing. <sup>9</sup> Revised.

# Economic Trends Affecting Agriculture

Year and month	Industrial production (1935-39=100) <sup>1</sup>	Total income of industrial workers (1935-39=100) <sup>2</sup>	Average earnings of factory workers per worker (1910-14=100)	Wholesale prices of all commodities (1910-14=100) <sup>3</sup>	Index numbers of prices paid by farmers (1910-14=100)			Index numbers of prices received by farmers (1910-14=100)			
					Commodities	Wage rates for hired farm labor <sup>4</sup>	Commodities, interest, taxes, and wage rates	Livestock and products			
								Dairy products	Poultry and eggs	Meat animals	All live-stock
1910-14 average	58	50	100	100	100	100	100	100	100	100	100
1915-19 average	72	90	152	158	149	147	148	147	153	162	157
1920-24 average	75	122	221	160	159	181	168	159	163	121	140
1925-29 average	98	129	232	143	151	184	161	161	155	145	152
1930-34 average	74	78	179	107	117	121	124	105	94	83	91
1935-39 average	100	100	199	118	124	121	125	119	108	117	115
1940-44 average	192	237	315	139	148	211	152	169	145	166	162
1945-49 average	186	317	431	204	219	407	229	264	213	291	265
1950 average	200	369	516	236	246	425	255	247	181	340	278
1951 average	220	425	566	263	271	470	281	284	226	411	335
1951											
April	223	427	565	268	273	479	283	273	215	428	340
May	222	424	562	267	272	—	283	270	221	418	335
June	221	429	567	265	272	—	282	269	217	422	335
July	212	420	560	262	271	475	282	272	222	414	332
August	217	426	561	260	271	—	282	277	231	416	336
September	218	429	571	259	271	—	282	283	247	411	337
October	218	425	570	260	272	476	283	294	247	410	340
November	219	426	575	260	274	—	284	305	249	387	332
December	218	435	587	260	273	—	284	314	233	379	328
1952											
January	220	430	585	254	275	498	287	316	200	376	320
February	222	430	583	253	276	—	288	317	181	377	317
March	222	—	—	252	275	—	288	305	177	372	310
April	—	—	—	—	276	510	289	291	180	372	306
Index numbers of prices received by farmers (1910-14=100)											
Crops											
Year and month	Food grains	Feed grains and hay	To-bacco	Cotton	Oil-bearing crops	Fruit	Truck crops	All crops	All crops and live-stock	Parity ratio <sup>6</sup>	
1910-14 average	100	100	100	100	100	100	—	—	100	100	100
1915-19 average	193	161	183	175	201	126	—	—	171	164	111
1920-24 average	147	125	189	197	155	157	152	162	150	89	—
1925-29 average	141	118	169	150	135	146	145	143	148	92	—
1930-34 average	70	76	117	77	78	98	104	84	88	71	—
1935-39 average	94	95	172	87	113	95	95	99	99	86	—
1940-44 average	123	119	241	138	170	150	164	145	154	101	—
1945-49 average	222	205	377	240	289	216	206	234	250	109	—
1950 average	224	187	402	280	276	200	185	232	256	100	—
1951 average	243	220	436	335	339	193	239	264	302	107	—
1951	247	222	438	363	385	209	225	275	309	109	—
April	244	223	438	357	380	194	239	271	305	108	—
May	240	217	438	353	358	200	189	263	301	107	—
June	236	213	438	329	317	175	204	252	294	104	—
July	234	215	430	291	294	207	181	244	292	104	—
August	233	216	423	283	288	201	161	239	291	103	—
September	239	219	445	304	296	188	171	247	296	105	—
October	249	224	424	345	307	172	249	267	301	106	—
November	253	233	440	339	309	177	331	280	305	107	—
December	253	233	440	313	279	179	308	272	290	100	—
1952	251	234	431	325	303	171	337	277	300	105	—
January	249	230	436	313	296	168	217	259	289	100	—
February	251	229	435	309	284	176	265	265	288	100	—
March	250	229	435	313	279	179	308	272	290	100	—
April	—	—	—	—	—	—	—	—	—	—	—

<sup>1</sup> Federal Reserve Board: represents output of mining and manufacturing; monthly data adjusted for seasonal variation.

<sup>2</sup> Computed from data furnished by Bureau of Labor Statistics and Interstate Commerce Commission on payroll rolls in mining, manufacturing, and transportation; monthly data adjusted for seasonal variation. Revised January 1950.

<sup>3</sup> Bureau of Labor Statistics.

<sup>4</sup> Farm wage rates simple averages of quarterly data, seasonally adjusted.

<sup>5</sup> Revised.

<sup>6</sup> Ratio of index of prices received to index of prices paid, interest, taxes, and wage rates. This parity ratio will not necessarily be identical to a weighted average percent of parity for all farm products, largely because parity prices for some products are on a transitional basis. <sup>7</sup> 1924 only.

# Our Spice Supplies

(Continued from page 14)

but the postwar recovery of imports was unusually rapid. However, the high level reached in 1946 was not maintained in the 2 years that followed.

Cinnamon is imported into the United States in relatively small quantities except when cassia, which is commonly used as cinnamon in this country, is not available. During 1942-46 considerable quantities were imported—mostly from Ceylon. However, imports have been at a very low level since 1946.

Imports of mustard seed in 1950 of 16.1 million pounds exceeded the 1935-39 annual average of 11 million pounds. Canada provided about 57 percent in 1950; China, the Netherlands, and the United Kingdom provided most of the mustard seed in 1935-39.

Imports of most of the popular spices (except for pepper) in 1950 reached or exceeded the prewar (1935-39) level. A few, such as coriander seed, pimento, thyme, and tonka beans did not reach prewar rates.

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## Sugar Beet Mechanization

(Continued from page 10)

fornia, rental of mechanical harvesters from sugar companies was rather common. But as mechanization increased, custom harvesting became more important. In 1948, the usual charge for custom harvesting per acre of 17-ton beets was \$28.05. This compared with the usual cost of \$39.67 per acre for hand harvesting. Custom harvesting was therefore more economical for the small grower than hand harvesting.

Usually rental charges satisfactory to both the owner of a machine and the farmer who rents it can be decided upon between them.

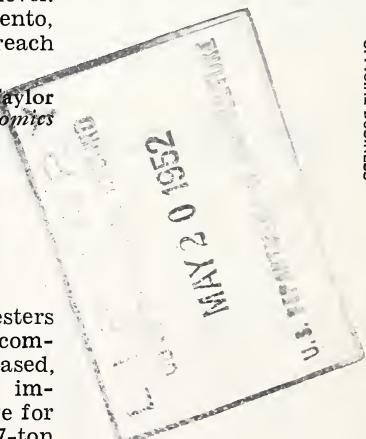
Although harvesting of sugar beets in California is now done mainly by machines, much remains to be done if the industry is to be further mecha-

nized. Thinning, hoeing, and weeding the beets still require about 28 man-hours of labor. This is more than half the 50 hours required to produce an acre of beets with the harvest mechanized.

Mechanizing the spring finger work required to produce sugar beets would probably reduce the labor required by about 12.5 man-hours and the cost of these operations by approximately \$10 an acre. Complete mechanization of the industry, if it should come eventually, could change the competitive relationship between sugar beets and other crops, both in areas in which production of beets is concentrated and in areas in which beets are only a minor crop. But the economies brought by mechanization in California have been in the main too small to shift the balance in favor of beets.

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